JUSTIFICATION FOR OTHER THAN FULL AND OPEN COMPETITION (JOFOC) (In accordance with Federal Acquisition Regulation (FAR) 6.3 – Other than Full and Open Competition)

1. This document is a justification for other than full and open competition prepared by NASA's Goddard Space Flight Center (NASA's GSFC):

NASA's Goddard Space Flight Center (GSFC)/ Wallops Flight Facility (WFF) proposes to enter into a contract with WV Communications, Inc. of Newbury Park, CA for Phase 3 of the Wallops Flight Facility Tri-Mode Flight Termination System Upgrade Project. This document justifies the determination for using other than full and open competition.

2. The nature and/or description of the action being approved:

The Government intends to purchase equipment for Phase 3 of the Wallops Flight Facility Tri-Mode Flight Termination System Upgrade Project. Phase 1 was purchased and installed through the Near Earth Network Systems (NENS) contractor (Honeywell) in 2009. The equipment purchased in Phase 1 was acquired from WV Communications. Phase 2 was purchased by the Government under PO# NNG10WQ64P. The equipment purchased in Phase 2 was also acquired from WV Communications. Failure to procure Phase 3 equipment from the same vendor will result in an exponential cost to the Government and will result in schedule slips and redundancy of costs. WV Communications has access to RCC 208-06 through the Range Commanders Council. Access to RCC 208-06 is essential as the government will not furnish this sensitive document due to its limited distribution classification.

3. Description of the supplies or services required, including an estimated value:

The equipment needed for Phase 3 of the multi-year project is as follows:

- One Tri-Mode Command Exciter Encoder (TMCEE) Model EX 1001, estimated value
- One Tri-Mode Command Decoder Receiver (TMCDR) Model RX1001, estimated value
- Two 2000 Watt High Power Amplifier Model SYS1023, estimated value each

Total estimated value for all equipment is

The requested equipment will comply with NASA Procedural Requirement 2810.1A, which specifies that only National Security Agency (NSA) approved and endorsed encryption products and/or techniques shall be used for protecting all telemetry and telecommunications involving radio transmissions or signals for command/destruct uplinks to launch vehicles, spacecraft, test aircraft, and other manned or unmanned aerospace vehicles. Currently, Range Safety Office must request a waiver for every WFF launch because the existing Flight Termination System does not meet this NASA requirement.

The requested equipment will support the current command and control Ultra High Frequency (UHF) band currently in use as well as the new UHF band that was identified for migration. Frequency migration is necessary to eliminate interference events and ever increasing frequency utilization precoordination prior to a command and control mission. The new frequency band will be protected from

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other WFF frequency users. For cost efficiency, it is in the best interest of the Government to acquire equipment that can support both frequency bands so that it is available to use prior to and after the frequency migration.

The requested equipment allows support of the existing Inter Range Instrumentation Group (IRIG) modulation technique while technologies mature allowing projects and programs ease of transitioning to Enhanced Flight Termination System (EFTS). It also provides High-Alpha modulation for sensitive projects while the EFTS space qualified hardware is being manufactured and tested. Finally, the EFTS modulation capabilities are included so NASA/WFF will be prepared to support launches when the flight receivers reach technical maturity and are requested for use by launch vehicle providers.

The procurement of the requested equipment will also replace the present flight termination equipment employed at Wallops Flight Facility which is aging and/or obsolete. This will allow WFF to reduce project and program safety risk as well as decrease maintenance and operations costs associated with the legacy equipment.

The equipment listed supports all NASA Strategic Goals because it can support any mission or program. It can be integrated with the existing antennas and provide Space Transportation System (STS) voice communications support. It supports completion of the International Space Station (ISS) though support of Taurus II and the Commercial Orbital Transportation Services (COTS) and Commercial Resupply Services (CRS) programs. Since it can support all available FTS modulation techniques it will enable science, exploration, and aeronautics. It is a key part of ground systems for launch services. The equipment will enable partnerships with the emerging commercial space sector including the Taurus II and COTS/CRS programs. Launch services required for any and all aspects of exploration will be advanced by this equipment.

4. Statutory authority permitting other than full and open competition:

10 U.S.C. 2304 (c) (1) - only one responsible source and no other type of supplies or services will satisfy agency requirements, as implemented by FAR 6.302-1(a) (2).

5. A demonstration that the proposed contractor's unique qualifications or the nature of the acquisition requires use of the authority cited:

WV Communications is the original equipment manufacturer and sole distributor of the requested equipment. During Phase 1, one half of the ground segment of a dual redundant Flight Termination System was obtained from WV Communications. During Phase 2, the second half of the ground segment of the dual redundant Flight Termination System was obtained. For Phase 3, as outlined in Section 3 of this document, additional TMCEE, TMCDR, and High Power Amplifiers will be obtained to begin outfitting one of the NASA/Wallops Mobile Command Destruct Systems. In order for the components procured in Phase 3 to integrate with the existing equipment they must be obtained from WV Communications. Any other vendor would have to reverse engineer the communications format and messaging which would violate the copyright of WV Communications.

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Also, the reverse engineering of this proprietary communications format would add substantial risk to this Safety Critical project that could not be overcome with testing or analysis.

6. Description of the efforts made to ensure that offers are solicited from as many potential sources as practicable, including whether a notice was or will be publicized as required by Federal Acquisition Regulation (FAR) 5.202:

A notice regarding this effort was placed in the Government-wide Point of Entry and on the NASA Acquisition Information System for 15 days as required by Federal Acquisition Part 5.2. The results of the synopsis are included in section 10.

7. A determination by the contracting officer that the anticipated cost to the Government will be fair and reasonable:

The contracting officer will utilize published price lists obtained from the vendor to ensure fair and reasonable pricing.

8. Description of the market research conducted, and the results, or a statement of the reasons market research was not conducted:

Market research was done to determine if the equipment needed for the Wallops Flight Facility Tri-Mode FTS Upgrade Project was commercially available. In 2009, three vendors were found to offer their own proprietary versions of the needed equipment. WV Communications, Inc. provided a significantly lower cost for the phased equipment needed. Based on the availability of funds, a phased acquisition approach was decided upon. Phase 1 consisted of acquisition of limited amount of equipment to determine its performance. Phase 2 acquired the second half of the dual redundant system between the Range Control Center and the Fixed Command Site. Phase 3 is what is being accomplished with this procurement.

A notice to FedBizOpps was published on TBD to announce NASA's intention to award a sole source contract. The results of the synopsis will be documented in paragraph 10.

9. Other facts supporting the use of other than full and open competition:

This is a follow-on procurement to Phases 1 and 2 completed in 2009 and 2010. If this equipment is not procured the investment made during Phases 1 and 2 will be lost and NASA/WFF will be no closer to compliance with NPR 2810.1A and will continue to require a waiver for every launch. If the Phase 3 procurement does not move forward NASA/WFF will fall behind schedule for completion of the project. This schedule has been reported to other Test Ranges through the Range Commanders Council and NASA Headquarters as well as current and potential Range customers.

The equipment listed supports all NASA Strategic Goals because it can support any mission or program. It can be integrated with the existing antennas and provide Space Transportation System (STS) voice communications support. It supports completion of the International Space Station (ISS) though support of Taurus II and the Commercial Orbital Transportation Services (COTS) and Commercial Resupply Services (CRS) programs. Since it can support all available FTS modulation techniques it will enable science, exploration, and aeronautics. It is a key part of ground systems for launch services. The

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equipment will enable partnerships with the emerging commercial space sector including the Taurus II and COTS/CRS programs. Launch services required for any and all aspects of exploration will be advanced by this equipment.

10. Sources, if any, that expressed an interest, in writing, in the acquisition:

A notice was published to FedBizOpps on July 13, 2011 announcing NASA/GSFC's intentions to award a sole source contract. Firms desiring consideration were requested to fully indentify their interest within 15 days of the date of publication of the synopsis. Mountain Chief Management Services, Inc. sent an email on 7/14/2011 indicating intent to submit a proposal on solicitation #NNG11397680Q. They also requested we add the contract clause FAR 52.219-4, HUBZone Price Evaluation Preference to the full and open competitive solicitation, as we have the authority to do so. The Contracting Officer sent a response to Mountain Chief Management Services, email on 7/28/2011 that we intend on issuing the RFQ sole source to WV Communications and requested they submit their capabilities and qualifications to perform the effort by closing date of the synopsis. No further communications from any company.

11. The actions the Agency may take to remove or overcome any barriers to competition before any subsequent acquisition for the supplies or services required:

There are no barriers to competition to remove or overcome for any subsequent acquisition for this equipment. New requirements for FTS systems will be competed.

JOFOC Signature Page for Phase 3 of WFF Tri-Mode Flight Termination System Upgrade Project

TECHNICAL DIRECTORATE:

I certify that the facts presented in this justification

are accurate and complete.

Signature

ate /

CONTRACTING OFFICER: (APPROVAL)

I certify that this justification is accurate and complete to the best of my knowledge and belief.

Signature

Date